STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

October 28, 2008

Michael Glowinski, Utilities Manger
United Water NACO
Alpena Water/Wastewater Utility
210 Harbor Drive
Alpena MI 49707

Dear Mr. Glowinski:

The Department of Environmental Quality, Water Bureau, Drinking Water and Environmental Health Section, On-Site Wastewater Unit, review of the Alpena Septage Receiving Facility operating plan is complete. The plan meets the requirements outlined in Section 11715b of Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Therefore, the operating plan is approved.

The receiving facility must operate in accordance with the approved plan. If a change in operations or conditions is anticipated, please file an amendment to the plan at least thirty (30) days prior to the proposed date for implementation.

Thank you for your continued environmental stewardship and service to those with on-site septic systems in and around your community. If you have any questions regarding this matter, please contact me.

Sincerely,

James Lahti
Drinking Water and Environmental Health Section
Lansing Operations Division
Water Bureau
517-241-1392

JWL:SAW

cc: Mr. Scott Smith, DHD #4, Alpena Office
Mr. Mike Stifler, DEQ, Cadillac Office

Alpena Water/Wastewater Utility
Alpena Water Recycling Plant
Septage Receiving Facility Operating Plan

The City of Alpena owns a wastewater treatment plant and wastewater collection system that services domestic, commercial, institutional and industrial customers in the City of Alpena and in portions of Alpena Township. Since 1986 Earth Tech Operation Services has operated and maintained the Alpena Water/Wastewater Utility on a contractual basis for the city. The city is currently in the process of constructing a septage receiving factility. The operation and maintenance of the new septage receiving facility will also be part of Earth Tech's contractual responsibility when it is completed. The new facility is expected to be operational by September 2008.

The State of Michigan requires the development of a Septage Receiving Facility Operating Plan in accordance with Part 117 of the Septage Waste Services of the Natural Resources and Environmental Protection Act, 1994 P.A 451. This plan is submitted to comply with that requirement.

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A. City of Alpena Septage Receiving Facility Address

City of Alpena Water Recycling Plant
210 Harbor Drive
Alpena, MI 49707

Hours of Operation

Monday through Friday 8:00 a.m. to 3:00 p.m.

Discharges allowed by permit only

Fees

3 year Permit Fee	$100.00
Septage Receiving Fee	$ 0.025/gallon

Contacts: Mike Glowinski, Utility Manger
Alpena Water/Wastewater Utility
210 Harbor Drive
Alpena, MI 49707
Phone: 989-354-1401
Fax: 989-354-8472
Michael.glowinski@earthtech.com

Bob Hilla, Superintendent
Alpena Water Recycling Plant
210 Harbor Drive
Alpena, MI 49707
Phone: 989-354-1402
Fax: 989-354-8472
Bob.hilla @earthtech.com

B. Introduction

The Alpena Water Recycling Plant (NPDES permit No MI0022195) is a 5.5 MGD capacity wastewater treatment facility that serves customers within the City of Alpena and portions of Alpena Township. The treatment train at the facility consists of the following processes:

1. Preliminary Treatment
    i. Fine screening
    ii. Aerated grit removal
2. Primary Clarification
3. Secondary Treatment
    i. Fine bubble conventional activated sludge
    ii. Final Clarification
4. Chlorination
5. De-chlorination
6. Anaerobic Digestion – Primary and Secondary
7. Biosolids storage with land application
8. Odor control using chemical scrubbing.

The treatment plant has operated in continuous compliance with its all NPDES permit requirements for 97 consecutive months. The facility maintains a Federal Industrial Pretreatment Program, a Mercury Minimization Plan and Biosolids Management Plan.

Since 1992, the facility has accepted trucked in waste for treatment, the majority of which has been landfill leachate. Up to 18,000 gallons of leachate/day has been accepted without any adverse impact on treatment plant performance.

Since the early 1990's the City of Alpena has been investigating the feasibility of constructing a septage receiving facility. The initial evaluation occurred around the time the State of Michigan was considering regulating septic waste haulers. In response to this proposed legislation, the city began receiving inquiries about disposing of septage at the city wastewater treatment facility. At that time the plant was not equipped to handle this material as a separate solid waste stream. Therefore and it would have had to be dumped into the plant head works and pass through the entire treatment train. Many plants have experienced operational difficulties using this method. In order to protect the plant operation from the adverse operational impacts, it was decided to deny any septage discharges until the necessary receiving equipment could be budgeted, procured and installed.

The State of Michigan has subsequently enacted legislation in Part 117 of the Natural Resources and Environmental Protection Act directed at controlling the disposal of septic tank waste. In addition, federal regulations under 40 CFR part 503 contain requirements which exceed Part 117 rules when domestic septage is land applied. These rules are designed to protect public health and the environment from problems associated with the pollutants found in domestic septage. A number of private septage waste haulers in the Alpena area have installed the equipment necessary to comply with these regulations and they are expected to continue to utilize these facilities even after the Alpena Septage Receiving Facility becomes operational. Two of these companies have indicated that they may use the city facility if they are serving customers close to the plant and the price is competitive.

In 2005, the City of Alpena submitted a State Revolving Loan Fund (SRF) application to fund $5 million worth of improvements at the water recycling plant and in the collection system. The application included funding for the construction of a septage receiving station at the Alpena Water Recycling Plant. Some of the potential positive impacts resulting from providing treatment service include the following:

- Enhancing the protection of the watershed
- Protecting drinking water supplies
- Increasing methane gas production in the anaerobic digesters at the water recycling plant
- Reducing operational costs for septage haulers
- Improving the quality of biosolids being land applied

C. Description of Septage Receiving Facilities

The City of Alpena intends to begin accepting domestic septage for treatment in September 2008. The City will continue to provide the service as long as the wastewater treatment facility remains within capacity and is in compliance with permit limitations. The treatment facility will accept domestic septage and porta-pot waste only. Food establishment septage will not be accepted.

The treatment equipment will be located at the Alpena Water Recycling Plant within a fenced perimeter with locked gates that limit access to defined operating hours. The receiving equipment includes a flow meter, gravel trap, fine screen, grinder, and washer. Removed screenings will be stored and eventually disposed in a sanitary landfill along with the screenings removed in the plant head works. A receiving station building will house all related equipment. Haulers will be able to access the facility using a circle drive. Individual loads received will be tracked using an automated card system. The

building is heated and ventilated to allow any odors generated to be collected and transported the recycling plant odor control scrubbers.

After screening the septage will flow by gravity to an existing gravity thickener for storage. The septage will be pumped via piston pump to the primary anaerobic digester for stabilization in volumes that do inhibit digester operation. The sludge thickener building is heated and ventilated with the air collected and treated by the plants odor control scrubbers. The capacity of the thickener is 115,000 gallons, and the volume of septage pumped to the primary anaerobic digester is expected to be less than 500 gallons per day.

D. Anaerobic Digestion Treatment Capabilities

The treatment plant has a total anaerobic digester capacity of 600,000 gallons. The 2006/2007 Annual Report for the Alpena Biosolids Program shows that the plant complied with the Vector Attraction Reduction requirements contained in the Part 31 Rules of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended. The average Mass Volatile Reduction for the last reporting year was 52.6%.

The 2006/2007 Biosolids Report also demonstrated compliance with Pathogen Reduction criteria needed for Class B designation. Records show that the primary anaerobic digester had an average detention time of 60 days, with an average temperature of 38 C.

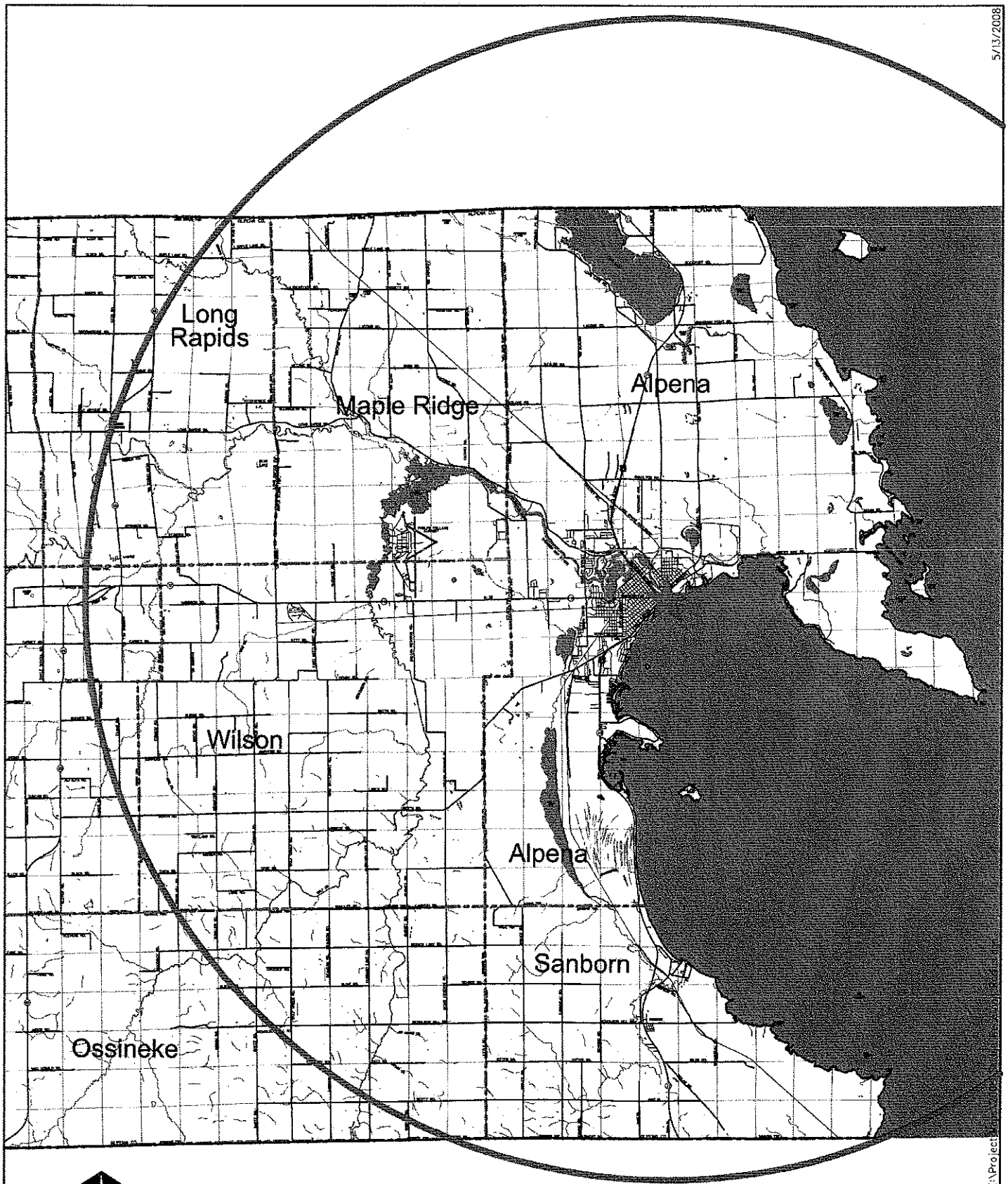
Daily loading to the primary digester ranges from 10,000 to 20,000 gallons per day with a daily average of 13,625 gallons/day. We expect that septage pumping rates will not exceed 500 gallons per day. This is less than a 4% increase in the normal hydraulic loading and only about 50 lbs/day of additional volatile loading to the primary digester per day. This rate will not have a significant impact on volatile reduction or detention time. Currently the average volatile loading to the Alpena digester (0.1 lbs/ft3) is below the normal loading range (0.15 to 0.35 lbs/ft3) for a heated and mixed anaerobic digester. The expected loading from the septage should have little impact on digester operation.

Since the septage is not entering the liquid treatment phase at the facility, wet weather conditions play no factor in the decision to accept the waste.

E. Estimate of Annual Volume of Septage Received

The exact number of residences with septic systems in Alpena County is not known and we have made an estimate for this plan. There are approximately 7,000 municipal wastewater customers in the City of Alpena and Alpena County. If we assume 2.3 people reside at each customer address, then we estimate that 16,100 people are served by the municipal treatment facility. The most current census showed that Alpena County had 31,314 people in 2000. Subtracting the number of people served by the municipal facility from the total yields an estimated 15,214 served by onsite treatment units. If we assume that the average residence has 2.3 people, then we would expect that 6,615 tanks would need pumping once every ten years, or 661 per year. Finally, if we use a 1,000 gallon tank capacity as the average, then we estimate that 661,478 gallons of septage would need to be treated in Alpena County for the year.

Out of the four licensed septage haulers in Alpena County, three have the facilities to store and land apply and are not required to bring the material to the receiving facility. One hauler will be required to use the facility. Therefore, we estimate that 25% of the septage hauled in Alpena County will be received at the Alpena Water Recycling Plant. The receiving station will also accept septage generated in Alcona, Montmorency and Presque Isle Counties. Because of the distances that will need to be traveled from these counties, we do not expect volumes to be over 50,000 gallons/year. We estimate that the annual septage volume received will be less than 200,000 gallons.



5/13/2008

E:\Projects\...

NORTH

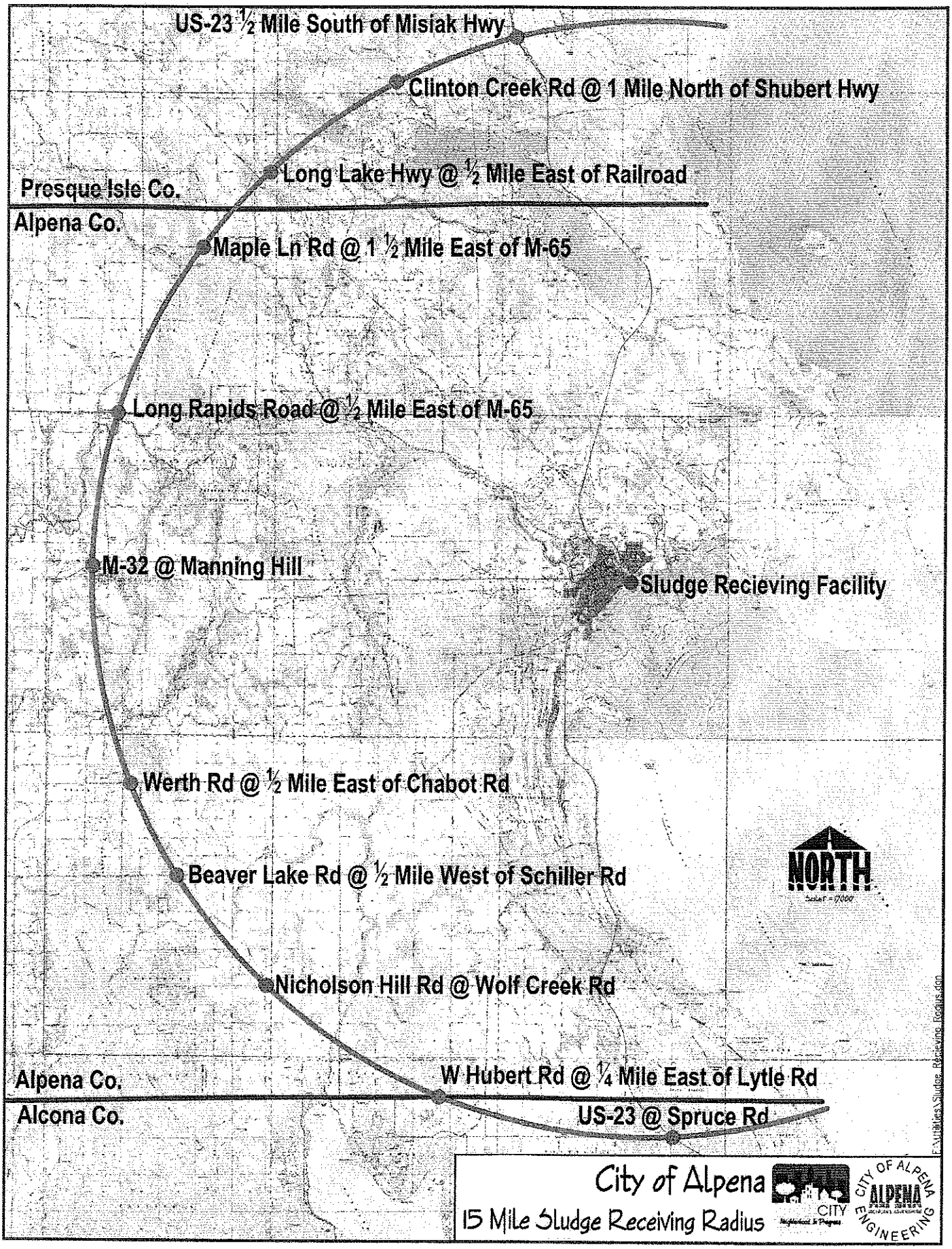
Scale: 1" = 17000'

15 Mi Sludge Receiving Radius

City of Alpena Water Recycling Plant

CITY OF ALPENA ENGINEERING

LAST EDITED BY: steves


US-23 ½ Mile South of Misiak Hwy
Clinton Creek Rd @ 1 Mile North of Shubert Hwy
Long Lake Hwy @ ½ Mile East of Railroad
Presque Isle Co.
Alpena Co.
Maple Ln Rd @ 1 ½ Mile East of M-65
Long Rapids Road @ ½ Mile East of M-65
M-32 @ Manning Hill
Sludge Recieving Facility
Werth Rd @ ½ Mile East of Chabot Rd
Beaver Lake Rd @ ½ Mile West of Schiller Rd
NORTH
Nicholson Hill Rd @ Wolf Creek Rd
Alpena Co.
W Hubert Rd @ ¼ Mile East of Lytle Rd
Alcona Co.
US-23 @ Spruce Rd
F:\Utilities\Sludge Recieving Radius.dgn
City of Alpena
15 Mile Sludge Receiving Radius
CITY
CITY OF ALPENA
ENGINEERING

Alpena News Publishing Co
130 Park Place
Alpena, MI 49707
(989) 354-3111

State of Michigan)
County of Alpena) ss:

Personally appeared before me,

William Speer, Publisher

Alpena Newspapers Publishing
A newspaper printed, published
and circulated in said county,
and that he knows of his own
Knowledge that the

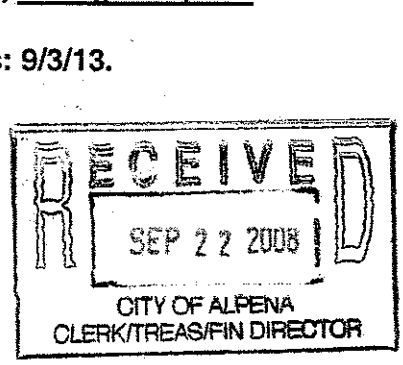
City of Alpena
Public Notice September 18, 2008

Made solemn oath that the attached notice was Inserted for **1** time(s) in said newspaper; and that the first of said publication was on the **18th** day **SEPTEMBER 2008** and the last of said publication was on the **18th** day of **SEPTEMBER 2008**.
And further deponent saith not.

William B Speer Publisher

Sworn to before me and signed in my presence, this **19th** day **of SEPTEMBER 2008**.

Kathryn L. Burton, Notary Public for Alpena County, Acting in Alpena County.
Notary Expires: 9/3/13.



PUBLIC NOTICE
September 18, 2008

City of Alpena
Alpena Water
Recycling Plant
Operating Plan for
Septage Waste
Receiving Facility

The State of Michigan, under part 117 of the Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994 P.A. 451, requires the development of an Operating Plan ("Plan") describing the receipt of septage waste.

The City of Alpena Water Recycling Plant intends to begin and continue to operate a facility to receive domestic septage in accordance with the developed plan.

The operating plan includes and details the following: the facility location and treatment capacity, hours of operation, types of wastes accepted, fees, service area, and special conditions applicable to acceptance of septage waste.

Copies of the Operating Plan have been submitted to all communities served by the Alpena Water Recycling Plant. The Operating Plan is available for review at the Alpena Water/Wastewater Utility Office located at 210 Harbor Drive between the hours of 8:00 a.m. and 4:00 p.m. Monday through Friday or at Alpena City Hall at 208 N. First Avenue between the hours of 8:00 a.m. and 5 p.m. Monday through Friday.

Written comments concerning this plan should be submitted by October 18, 2008 to the attention of:

Mike Glowinski
Utilities Manager
United Water NACO
Alpena
Water/Wastewater Utility
210 Harbor Drive
Alpena, MI 49707

For additional information, please contact Mike Glowinski at 989-354-1401.

DEQ

Septage Waste Receving Facility Checklist

Name of Septage Receiving Facility:
City of Alpena Water Recyling Plant

DEQ Reviewer: Jim Lahti
Review Date: October 2008

Address of Septage Receiving Facility:
210 Harbor Drive
Alpena, MI49707

Facility Contact: **Mike Glowinski**
Telephone Number: **989-354-1401**

Is the following information in the facility Operation Plan as required under Part 117?

Requirement	Yes	No	Comments
1. Location of septage RF.	x		
2. Hours of operation.	x		M-F 8am-3pm
3. Categories of septage waste the RF will receive.	x		domestic septage, porta john waste
4. Does the SWRF accept food establishment septage (grease trap waste)? If yes, have they calculated the nutrient loading of this waste and its impact on that allotted to treating septage waste?		x	
5. *Fee structure charged to hauler.	x		$.025/gallon + 3 year permit fee of $100
6. *Service area (septage acceptance) description of RF defined in detail.	x		

Name of Septage Receiving Facility: **City of Alpena Water Recycling Plant**

Requirement	Yes	No	Comments
7. Notice of proposed operation plan: a) Was it mailed to county HD and legislative body of each city, village and township located in whole or in part of the service area?	x		via newspaper - also called lhd
b) Was it public noticed in the local newspaper?	x		
c) Was it posted on the facility website?	x		
8. Did the notice contain the following? a. Statement that the RF proposed to or is currently receiving and will continue to receive septage waste for treatment.	x		
b. Statement in the notice that the proposed operating plan is available for review during normal work hours.	x		
c. A request for written comments on the proposed operation of the RF and the deadline for receipt of such comments, which shall not be less than 30 days after publication, posting, or mailing of the notice.	x		
d. Receiving facility capacity.			
I) Hydraulic capacity:	x		600 gpm
II) Organic capacity:	n/a		solids go directly to digester - not into plant
*III) Wet weather operation considerations (CSO & SSO)	N/A		